

### **REMARKS**

Claims 1-15, 23, 40, 49, 54 and 59-84 are pending in the application. With this amendment, Applicant has cancelled Claims 15, 23, 40, 49, 54, and 59-84 as drawn to a non-elected invention. Upon entry of the amendment, Claims 1-14 remain pending.

### **RESTRICTION REQUIREMENT**

In view of the finality of the restriction requirement and in the interest of expediting prosecution of the elected invention, Applicant has cancelled all of Claims 15-84 as drawn to a non-elected invention. Notwithstanding, Applicant respectfully requests the Examiner reconsider and withdraw the restriction requirement, rejoining all of the claims, but at least Claims 59-60, 73-77, and 78-84. Applicant traverses the requirement for restriction for the reasons stated in earlier replies, and reserves the right to petition under 37 CFR § 1.144 for review, once allowability of the elected claims is indicated.

### **REJECTION UNDER 35 U.S.C. § 103**

Claims 1-14 are rejected under 35 U.S.C. § 103(a) as obvious in light of the *Rees* reference (U.S. Pat. No. 5,006,594). Applicant respectfully submits the rejection is based on a misreading of the reference. The reference does not teach or suggest the subject matter of the claims. Accordingly, Applicant respectfully traverses the rejection and requests reconsideration.

As noted in the Office Action, Applicant has amended Claim 1 to recite that the thermoplastic material comprises two thermoplastic polymers that are melt processable.

The first polymer is fully fluorinated while the second is partially fluorinated. As discussed in the specification, the combination of fully fluorinated and partially fluorinated thermoplastic polymers leads to the advantages described therein.

Paragraph 52 of the specification explains that thermoplastic fluorine containing polymers used in the inventions are "melt processable." Melt processable polymers are said to soften and flow when heated and can be readily processed using thermoplastic techniques such as injection molding and the like. Because they are melt processable, the materials can be recycled by melting and reprocessing. The specification goes on to state that commercial embodiments are available containing, for example, 59% to 76% by weight fluorine. It is clear from the specification that non-melt processable thermoplastic fluorine containing polymers are not described as suitable for use in compositions of the invention.

The *Rees* reference does not disclose a fully fluorinated thermoplastic polymer and a partially fluorinated thermoplastic polymer that are both melt processable. The final rejection states that a copolymer of tetrafluoroethylene and perfluoroalkylvinylether (column 2, lines 43-45 of the *Rees* reference) is readable for being a fully fluorinated polymer such as the PFA recited in present Claim 14. The final rejection goes on to state that "presumably...said copolymer is...melt processable." Applicant respectfully submits that such a copolymer is in fact not melt processable.

Attention is respectfully drawn to the passage from the *Rees* reference at column 2, lines 29-49 (emphasis added):

"...The blends of this composition comprise a two phase composition having a continuous phase and a dispersed phase, together with a tetrafluoroethylene copolymer. The continuous phase consists essentially of a melt-processable crystalline

thermoplastic fluorocarbon resin.... The dispersed phase consists essentially of an amorphous crosslinked fluoroelastomer.... The blends contain 1 – 5 weight percent of a ...non-melt-processable tetrafluoroethylene co-polymer [the copolymer comprises] recurring units of tetrafluoroethylene and a comonomer.... Enough comonomer is present to cause the copolymer to compound uniformly...without forming visible agglomerates.”

Contrary to the position taken by the Examiner, the reference clearly states that the tetrafluoroethylene copolymer is non-melt processable. This is in direct contrast to the rejected claims, which recite a melt processable polymer.

Applicant acknowledges that the reference in the above passage is disclosing a copolymer of tetrafluoroethylene and a comonomer such as perfluoroalkylvinylether. Applicant further notes that the PFA material recited in Claim 14 and described in the specification at paragraph 53 is a copolymer of tetrafluoroethylene and such a comonomer. However, Applicant does not claim the material by the monomer content. Rather, Applicant has amended the claims to recite that the fully fluorinated thermoplastic polymer is melt processable. This limitation of the amended claims is not disclosed in the *Rees* reference as demonstrated above.

For the reasons discussed above, Applicant believes the *Rees* reference has been applied in error against the current Claims 1-14. Accordingly, Applicant respectfully requests that the rejection be withdrawn.

## CONCLUSION

For the reasons discussed above, Applicant believes this Amendment After Final places the claims in condition for allowance. Claims withdrawn as drawn to non-elected inventions have been cancelled, and deficiencies of the cited art against the remaining claims have been demonstrated. Accordingly, Applicant respectfully requests the rejection be withdrawn. The Examiner is invited to telephone the undersigned if that would be helpful to resolve any issues.

Respectfully submitted,

Dated: June 8, 2006

By:

  
Ronald W. Wangerow, Reg. No. 29,597

FREUDENBERG-NOK GENERAL PARTNERSHIP  
Legal Department  
47690 East Anchor Court  
Plymouth, MI 48170-2455  
Direct Line: (734) 354-5445  
Facsimile: (734) 451-1445